

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 02/00136

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B66B 1/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B66B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO INTERNAL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | US 5932852 A (TYNI ET AL.), 3 August 1999 (03.08.99), abstract -- | 1 |
| X | EP 0897891 A1 (KONE CORPORATION), 24 February 1999 (24.02.99), abstract -- | 1 |
| X | US 5612519 A (CHENAIIS), 18 March 1997 (18.03.97), column 1, line 65 - column 2, line 45, abstract -- | 1 |

 Further documents are listed in the continuation of Box C. See patent family annex.

| | |
|---|--|
| * Special categories of cited documents: | |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "E" earlier application or patent but published on or after the international filing date | "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search

Date of mailing of the international search report

30 Sept 2002

14.10.02

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Erik Wiss/LS
Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 02/00136

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 5394509 A (WINSTON), 28 February 1995 (28.02.95) ----- | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

02/09/02

International application No.

PCT/FI 02/00136

| Patent document cited in search report | Publication date | | Patent family member(s) | | Publication date |
|--|------------------|--|--|--|--|
| US 5932852 A | 03/08/99 | | AU 698715 B AU 5400996 A BR 9608080 A CN 1073963 B CN 1181741 A EP 0821652 A FI 102268 B FI 951925 A JP 11503706 T WO 9633123 A | | 05/11/98 07/11/96 26/01/99 31/10/01 13/05/98 04/02/98 00/00/00 22/10/96 30/03/99 24/10/96 |
| EP 0897891 A1 | 24/02/99 | | AU 731001 B AU 7616298 A BR 9803164 A FI 973346 A JP 11124279 A TW 438711 B US 5907137 A | | 22/03/01 25/02/99 19/10/99 16/02/99 11/05/99 00/00/00 25/05/99 |
| US 5612519 A | 18/03/97 | | DE 59304851 D EP 0565865 A,B FI 931640 A | | 00/00/00 20/10/93 15/10/93 |
| US 5394509 A | 28/02/95 | | NONE | | |